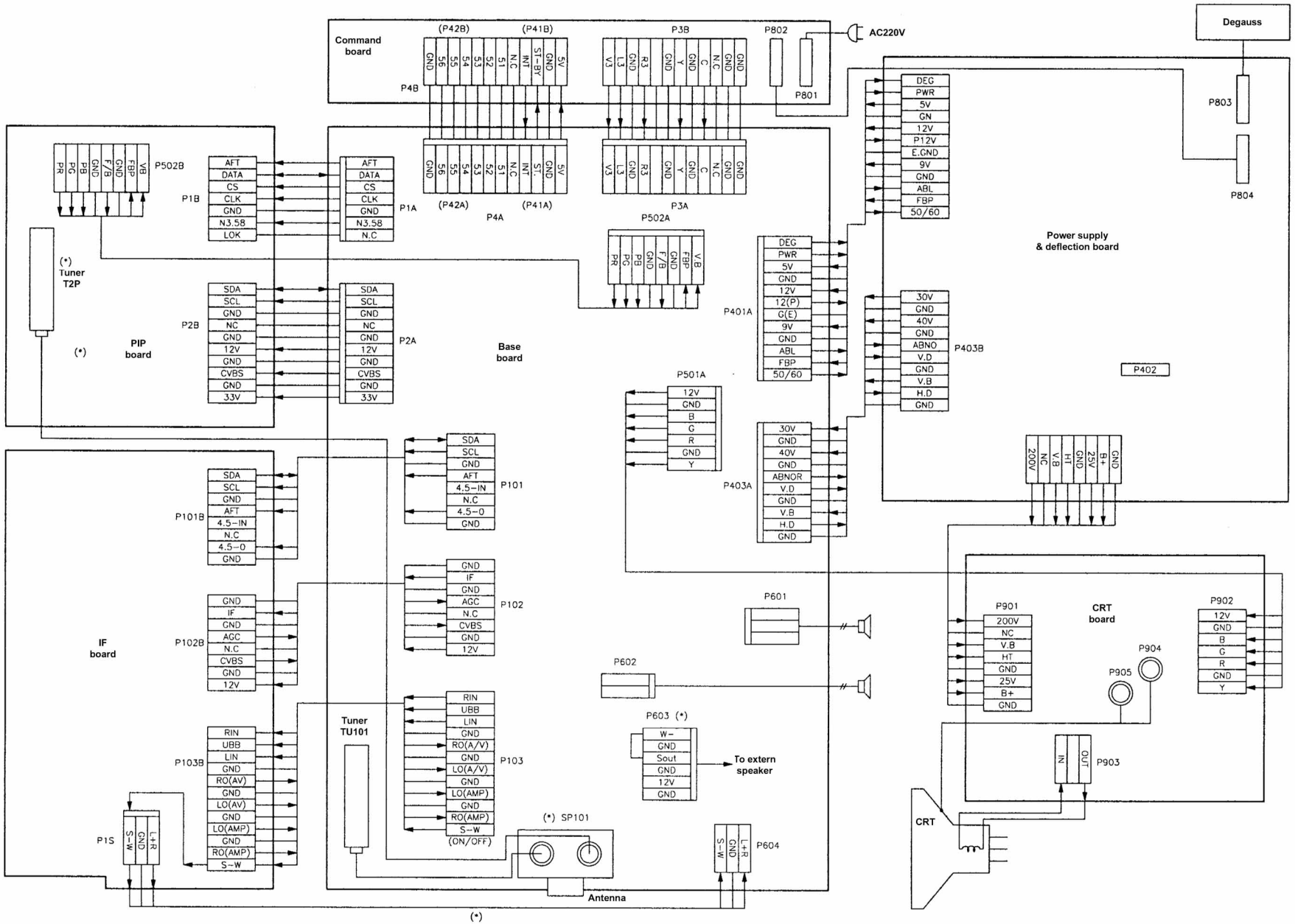
LG

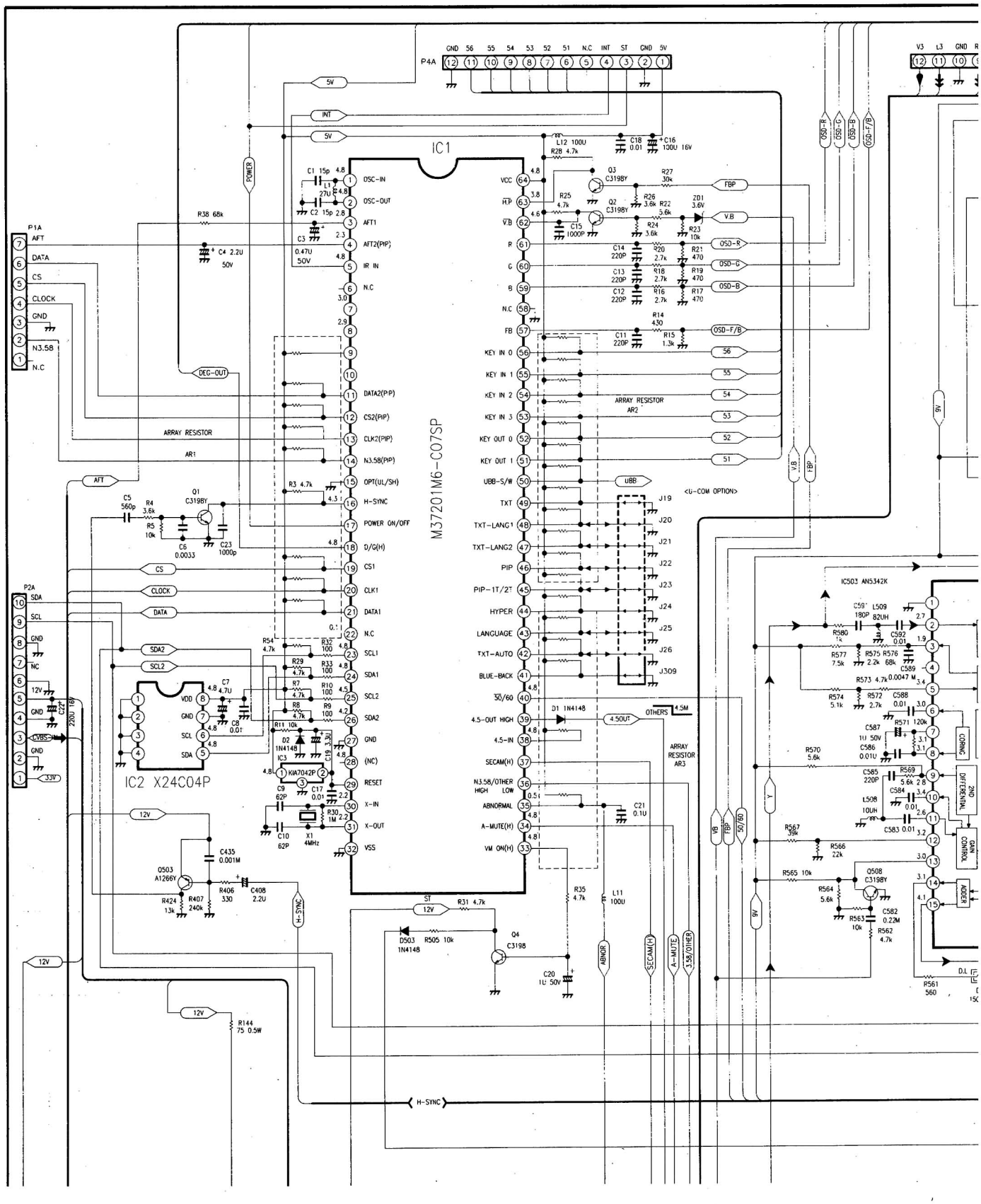
CF-29C44

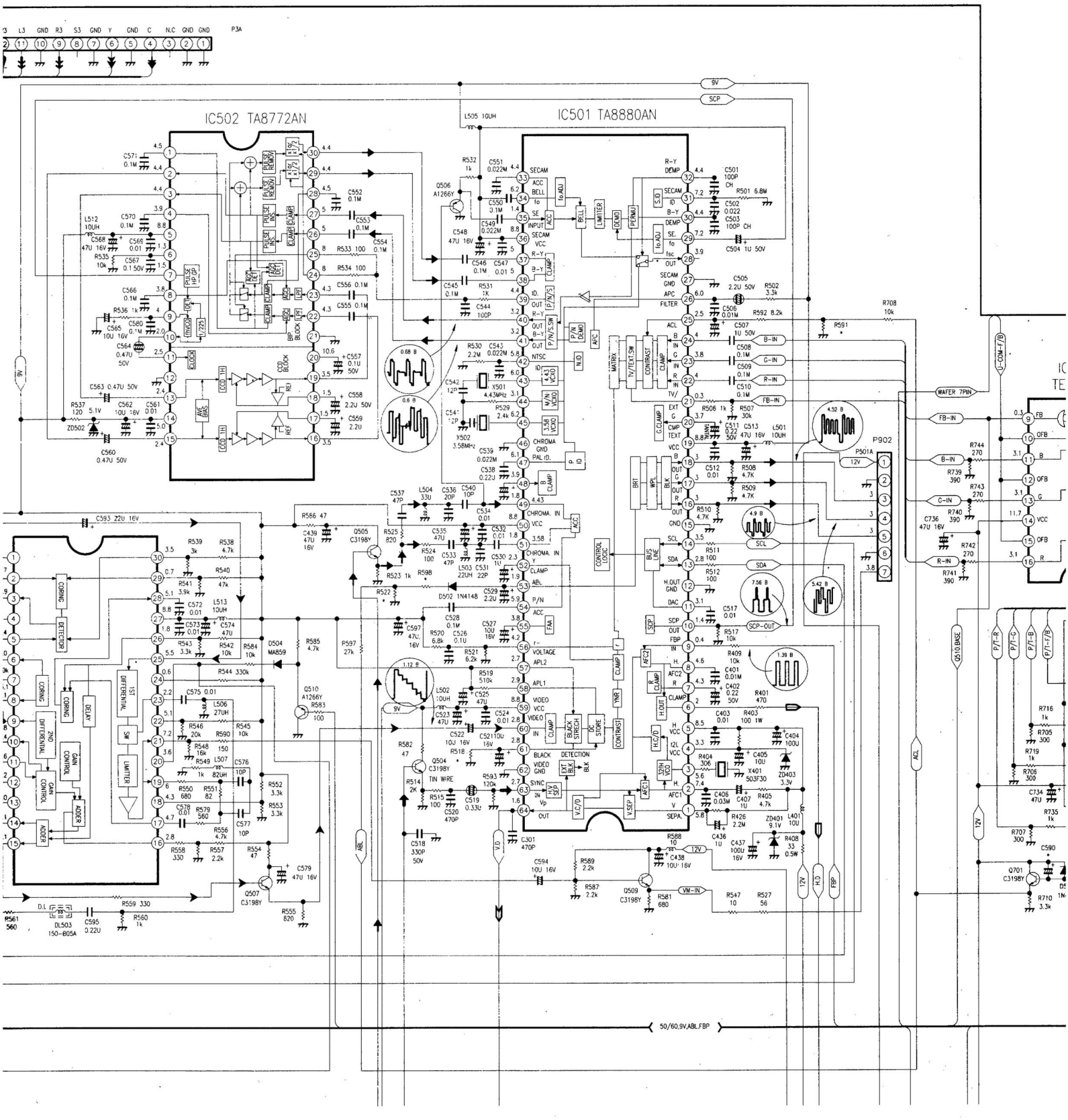
MODEL

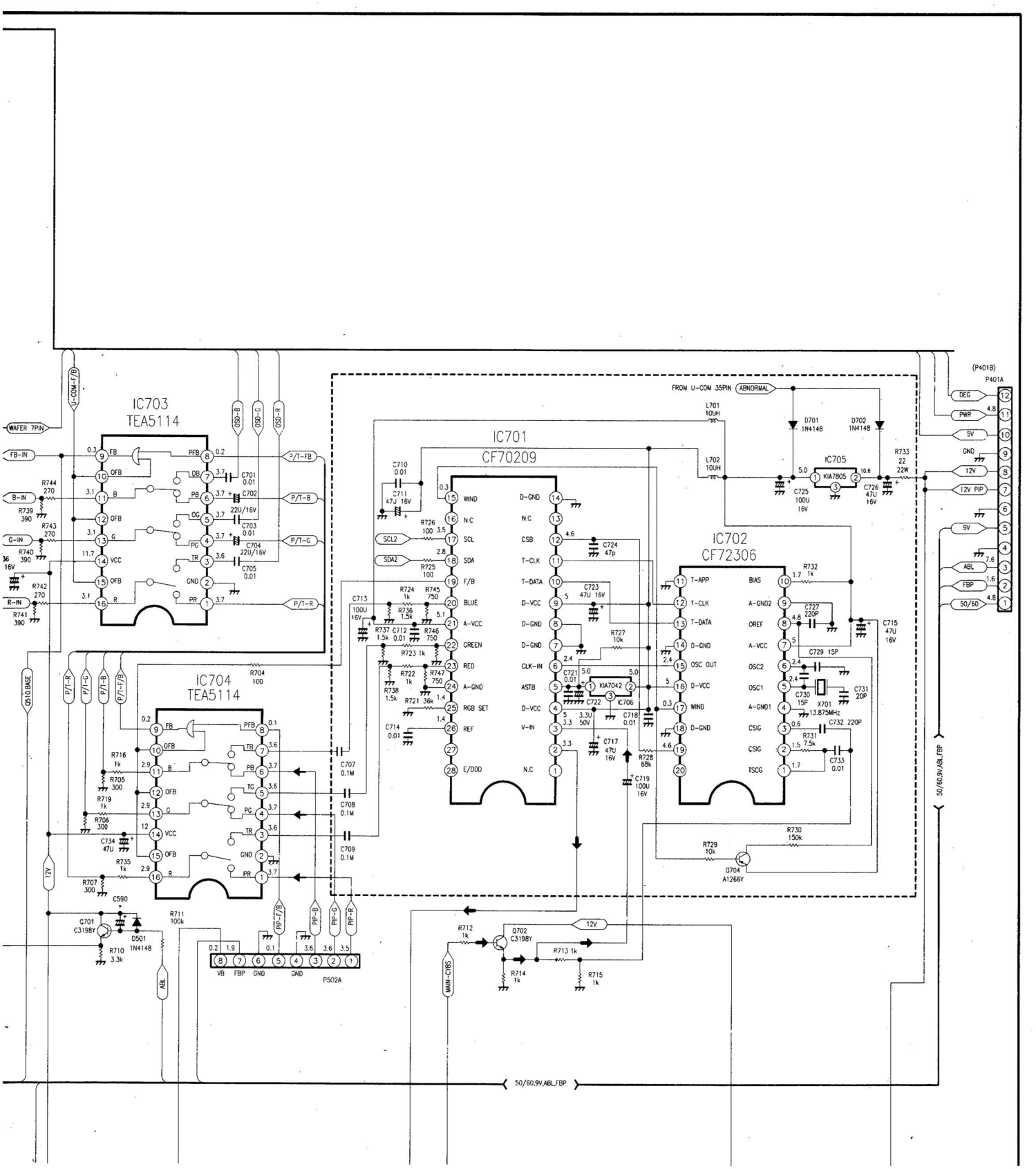
SERVICE MANUAL

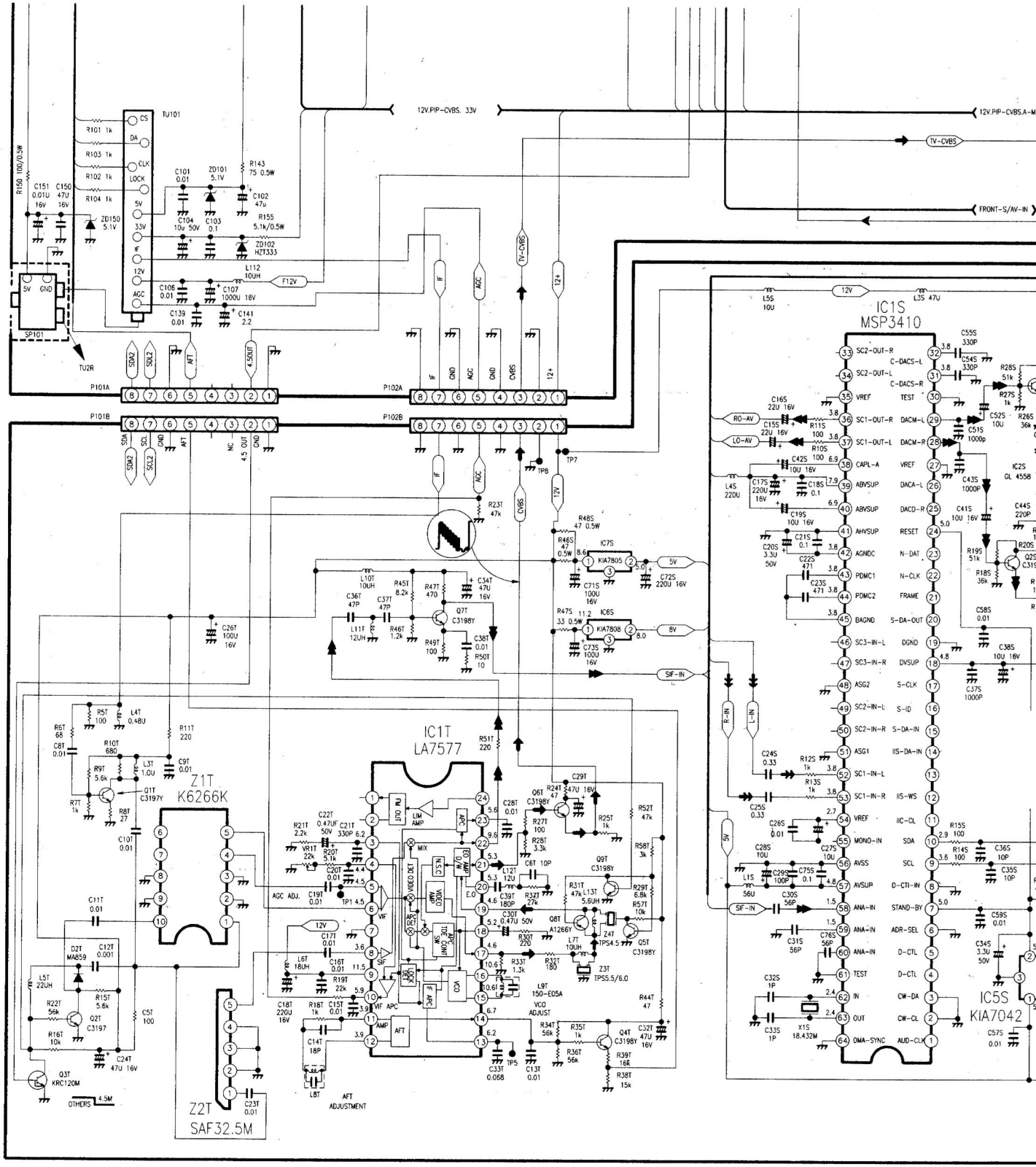
Gold Star (LG) MC-51A chassis

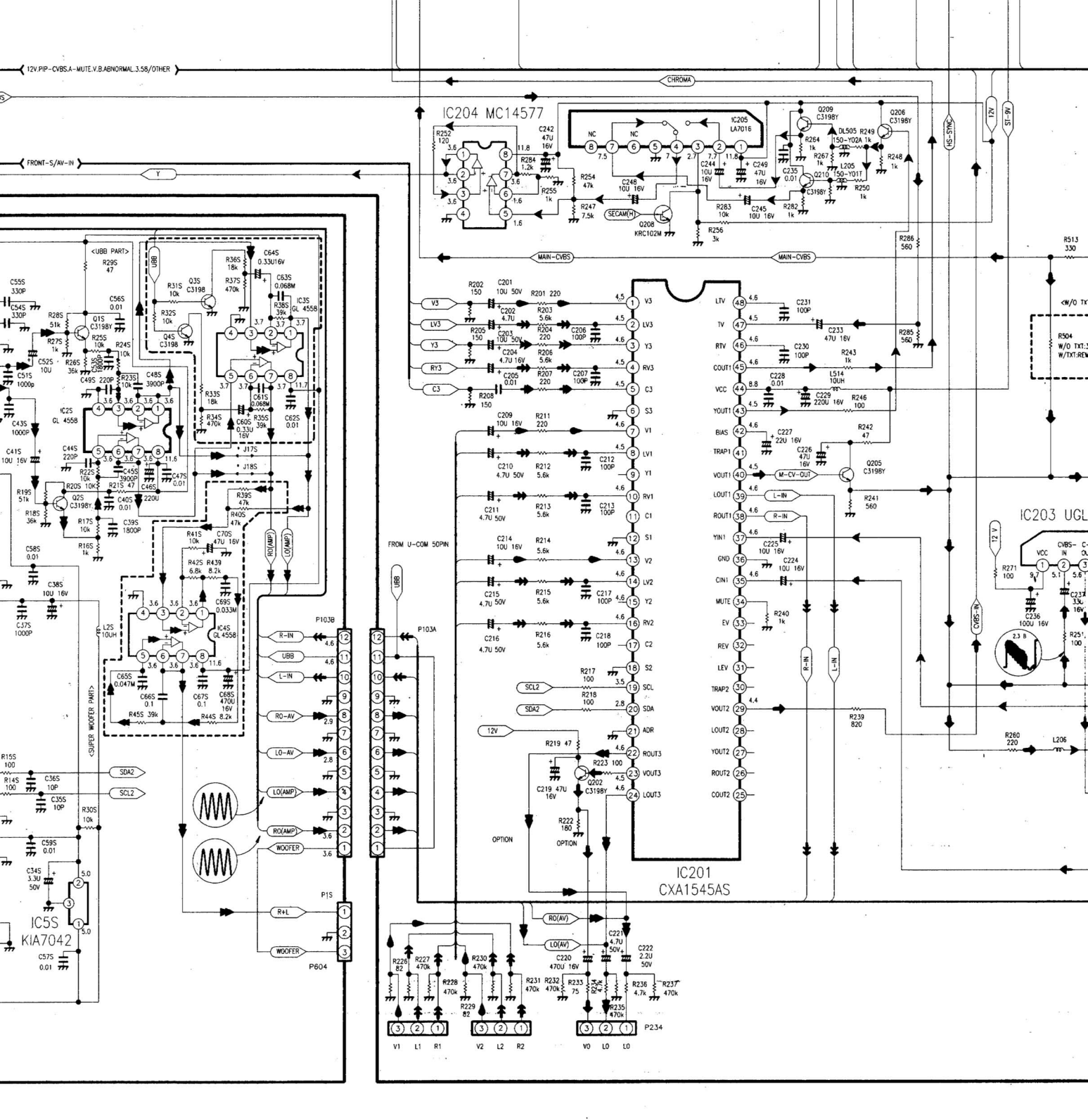


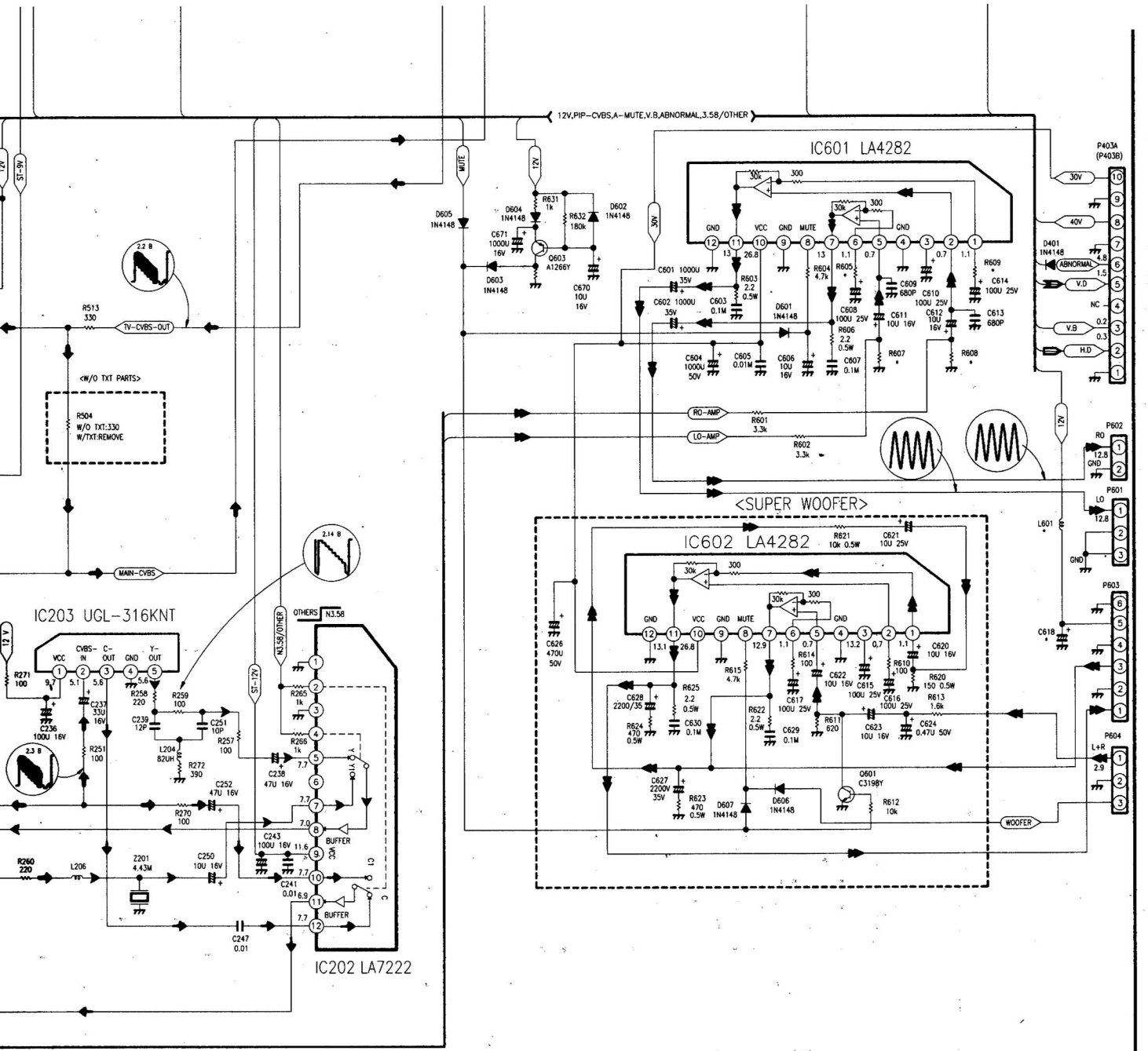

IC1
M37201M6-C07SP
IC2 X24C04P
IC503 AN5342K
P4A
P1A
P2A
5V
INT
POWER
DEG-OUT
ARRAY RESISTOR
AR1
AR2
AR3
AFT
CS
CLOCK
DATA
SDA2
SCL2
H-SYNC
OSC-IN
OSC-OUT
AFT1
AFT2(PIP)
IR IN
N.C
DATA2(PIP)
CS2(PIP)
CLK2(PIP)
N3.58(PIP)
OPT(UL/SH)
POWER ON/OFF
D/G(H)
CS1
CLK1
DATA1
SCL1
SDA1
SCL2
SDA2
GND
RESET
X-IN
X-OUT
VSS
FBP
V.B
OSD-R
OSD-G
OSD-B
OSD-F/B
uBB
<u-COM OPTION>
KEY IN 0
KEY IN 1
KEY IN 2
KEY IN 3
KEY OUT 0
KEY OUT 1
TXT
TXT-LANG1
TXT-LANG2
PIP
PIP-1T/2T
HYPER
LANGUAGE
TXT-AUTO
BLUE-BACK
50/60
4.5-OUT HIGH
4.5-IN
SECAM(H)
N3.58/OTHER
ABNORMAL
A-MUTE(H)
VM ON(H)
4.50UT
OTHERS
ABNOR
SECAM(H)
A-MUTE
3.58/OTHER
ST
12V
9V
CORING
DIFFERENTIAL
2ND
GAIN CONTROL
ADDER

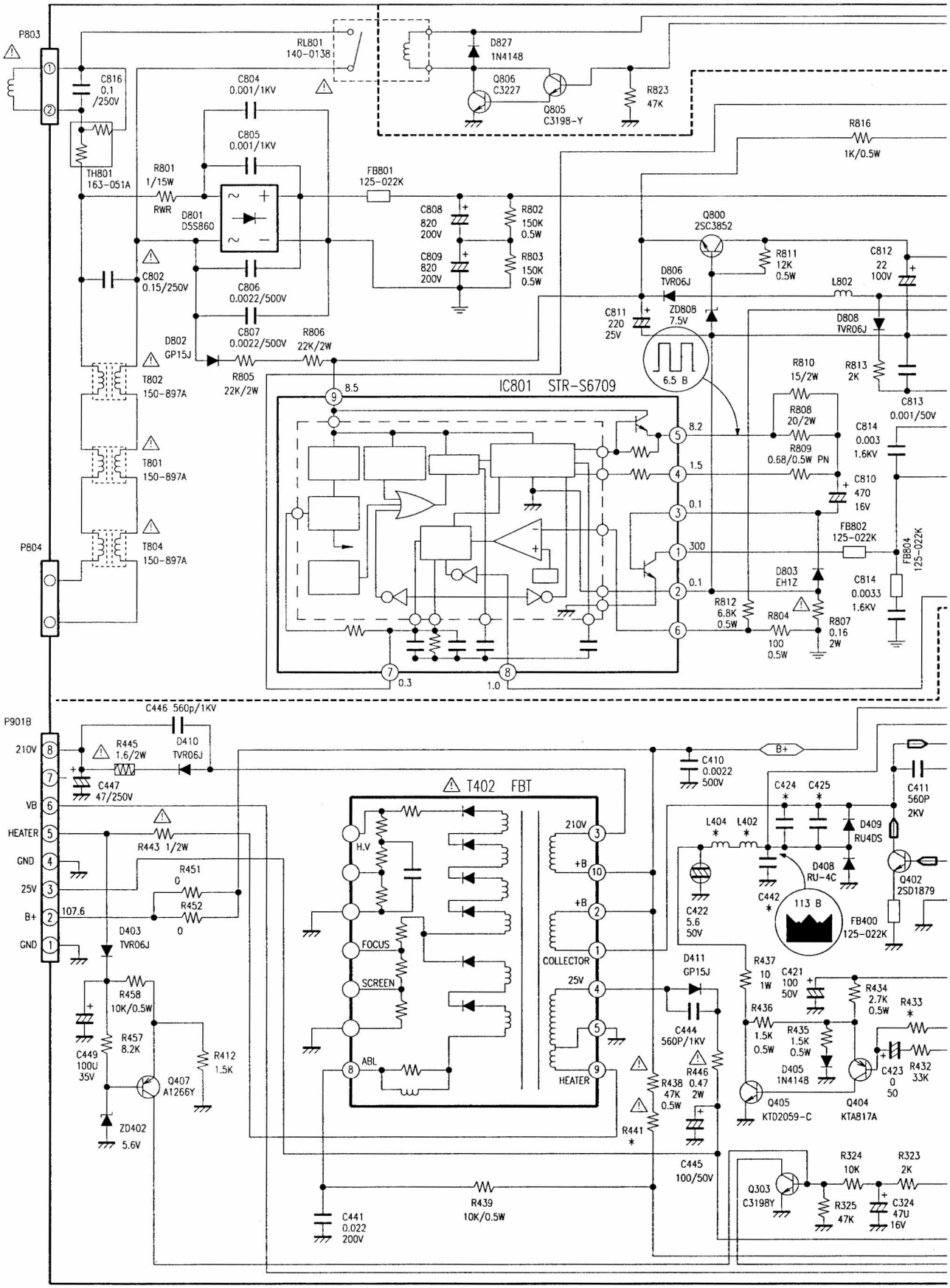

IC502 TA8772AN
IC501 TA8880AN
P3A
L3 GND R3 S3 GND Y GND C N.C GND GND
9V
SCP
L505 10UH
P902
P501A
WAFER 7PIN
FB-IN
B-IN
G-IN
R-IN
SCL
SDA
SCP-OUT
12V
VM-IN
50/60,9V,ABL,FBP
ABL
FBP
H.D
V.D
Q510 BASE
P/T-R
P/T-G
P/T-B
P/T-F/B


IC703
TEA5114
IC704
TEA5114
IC701
CF70209
IC702
CF72306
IC705
KIA7805
KIA7042
IC706
D701
1N4148
D702
1N4148
D501
1N4148
Q701
C3198Y
Q702
C3198Y
Q704
A1266Y
X701
13.875MHz
WAFER 7PIN
FB-IN
B-IN
G-IN
R-IN
U-COM-F/B
OSD-B
OSD-G
OSD-R
P/T-FB
P/T-B
P/T-G
P/T-R
Q510 BASE
12V
ABL
MAIN-OBS
FROM U-COM 35PIN
ABNORMAL
(P401B)
P401A
DEG
PWR
5V
GND
12V
12V PIP
9V
ABL
FBP
50/60
50/60,9V,ABL,FBP
P502A
VB
FBP
GND
GND
PIP-F/B
PIP-B
PIP-G
PIP-R
L701
10UH
L702
10UH
C701
0.01
C702
22U/16V
C703
0.01
C704
22U/16V
C705
0.01
C707
0.1M
C708
0.1M
C709
0.1M
C710
0.01
C711
47U 16V
C712
0.01
C713
100U
16V
C714
0.01
C715
47U
16V
C717
47U
16V
C718
0.01
C719
100U
16V
C722
3.3U
50V
C723
47U 16V
C724
47p
C725
100U
16V
C726
47U
16V
C727
220P
C729
15P
C730
15P
C731
20P
C732
220P
C733
0.01
C734
47U
C590
R704
100
R705
300
R706
300
R707
300
R710
3.3k
R711
100k
R712
1k
R713
1k
R714
1k
R715
1k
R716
1k
R719
1k
R721
36k
R722
1k
R723
1k
R724
1k
R725
100
R726
100
R727
10k
R728
68k
R729
10k
R730
150k
R731
7.5k
R732
1k
R733
22
22W
R735
1k
R736
1.5k
R737
1.5k
R738
1.5k
R739
390
R740
390
R741
390
R742
270
R743
270
R744
270
R745
750
R746
750
R747
750
SCL2
SDA2
WIND
N.C
SCL
SDA
F/B
BLUE
A-VCC
GREEN
RED
A-GND
RGB SET
REF
E/DDD
N.C
D-GND
N.C
CSB
T-CLK
T-DATA
D-VCC
D-GND
D-GND
CLK-IN
ASTB
D-VCC
V-IN
T-APP
T-CLK
T-DATA
D-GND
OSC OUT
D-VCC
WIND
D-GND
BIAS
A-GND2
OREF
A-VCC
OSC2
OSC1
A-GND1
CSIG
CSIG
TSCG

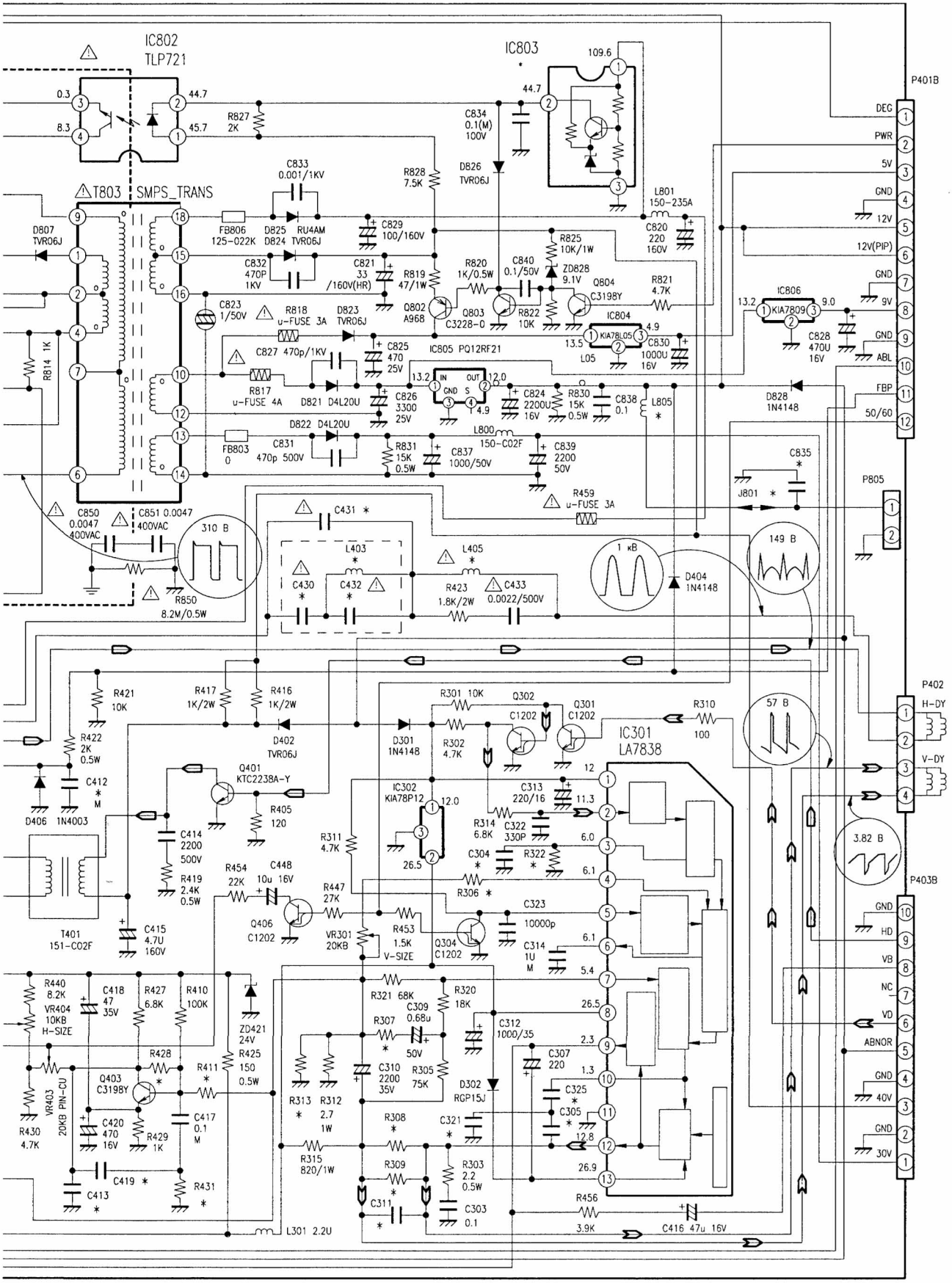

TU101
CS
DA
CLK
LOCK
5V
33V
IF
12V
AGC
R101 1k
R103 1k
R102 1k
R104 1k
R150 100/0.5W
C151 0.01U 16V
C150 47U 16V
ZD150 5.1V
C101 0.01
ZD101 5.1V
R143 75 0.5W
C102 47u
C104 10u 50V
C103 0.1
R155 5.1k/0.5W
ZD102 HZ7333
L112 10UH
F12V
C105 0.01
C107 1000u 16V
C139 0.01
C141 2.2
SP101
5V
GND
TU2R
SDA2
SCL2
AFT
4.5OUT
12V.PIP-CVBS. 33V
12V.PIP-CVBS.A-M
TV-CVBS
FRONT-S/AV-IN
P101A
P101B
P102A
P102B
IF
AGC
GND
CVBS
12+
NC
4.5 OUT
TP7
TP8
R23T 47k
R48S 47 0.5W
R46S 47 0.5W
IC7S
KIA7805
C71S 100U 16V
C72S 220U 16V
5V
L10T 10UH
R45T 8.2k
R47T 470
C34T 47U 16V
C36T 47P
C37T 47P
L11T 12UH
R46T 1.2k
Q7T C3198Y
R49T 100
C38T 0.01
R50T 10
R47S 11.2 33 0.5W
IC6S
KIA7808
C73S 100U 16V
8V
SIF-IN
C26T 100U 16V
IC1T
LA7577
R51T 220
R5T 100
L4T 0.48U
R6T 68
R11T 220
C8T 0.01
R10T 680
R9T 5.6k
L3T 1.0U
C9T 0.01
R7T 1k
R8T 27
Q1T C3197Y
Z1T
K6266K
C10T 0.01
C11T 0.01
D2T MA859
C12T 0.001
L5T 22UH
R22T 56k
R15T 5.6k
Q2T C3197
R16T 10k
C5T 100
C24T 47U 16V
Q3T KRC120M
OTHERS 4.5M
Z2T
SAF32.5M
C23T 0.01
C22T 0.47UF 50V
C21T 330P 6.2
R21T 2.2k
VR1T 22k
R20T 5.1k
C20T 0.01
AGC ADJ.
TP1 4.5
C19T 0.01
C17T 0.01
L6T 18UH
C16T 0.01
R19T 22k
C18T 220U 16V
R18T 1k
C15T 0.01
C14T 18P
L8T
AFT ADJUSTMENT
C29T
Q6T C3198Y
R24T 47
C28T 0.01
R27T 100
R28T 3.3k
C6T 10P
L12T 12U
R32T 27k
C39T 180P
R30T 0.47U 50V
R33T 1.3k
R32T 180
L7T 10UH
TPS4.5
Z4T
TPS5.5/6.0
Q8T A1266Y
R31T 47k
L13T 5.6UH
Q9T C3198Y
R29T 6.8k
R57T 10k
Q5T C3198Y
R52T 47k
R25T 1k
R58T 3k
L9T 150-E05A
VCO ADJUST
R44T 47
R34T 56k
R35T 1k
Q4T C3198Y
C32T 47U 16V
R39T 16k
R38T 15k
R36T 56k
C13T 0.01
C33T 0.068
TP5
R51T 220
IC2S
GL 4558
L4S 220U
L5S 10U
L3S 47U
IC1S
MSP3410
SC2-OUT-R
SC2-OUT-L
VREF
SC1-OUT-R
SC1-OUT-L
CAPL-A
ABVSUP
ABVSUP
AHVSUP
AGNDC
PDMC1
PDMC2
BAGND
SC3-IN-L
SC3-IN-R
ASG2
SC2-IN-L
SC2-IN-R
ASG1
SC1-IN-L
SC1-IN-R
VREF
MONO-IN
AVSS
AVSUP
ANA-IN
ANA-IN
ANA-IN
TEST
IN
OUT
DMA-SYNC
C-DACS-L
C-DACS-R
TEST
DACM-L
DACM-R
VREF
DACA-L
DACD-R
RESET
N-DAT
N-CLK
FRAME
S-DA-OUT
DGND
DVSUP
S-CLK
S-ID
S-DA-IN
IIS-DA-IN
IIS-WS
IIC-CL
SDA
SCL
D-CTI-IN
STAND-BY
ADR-SEL
D-CTL
D-CTL
CW-DA
CW-CL
AUD-CLK
C55S 330P
C54S 330P
R28S 51k
R27S 1k
C52S 10U
C51S 1000p
C43S 1000P
C44S 220P
C41S 10U 16V
R20S
R19S 51k
R18S 36k
C58S 0.01
C38S 10U 16V
C57S 1000P
R-IN
L-IN
C24S 0.33
R12S 1k
R13S 1k
C25S 0.33
C26S 0.01
C28S 10U
C27S 10U
C29S 100P
C75S 0.1
L1S 56U
C30S 56P
C76S 56P
C31S 56P
C32S 1P
C33S 1P
X1S 18.432M
R15S 100
R14S 100
C36S 10P
C35S 10P
C59S 0.01
C34S 3.3U 50V
C57S 0.01
IC5S
KIA7042
RO-AV
LO-AV
C16S 22U 16V
C15S 22U 16V
R11S 100
R10S
C42S 100 10U 16V
C17S 220U 16V
C18S 0.1
C19S 10U 16V
C21S 0.1
C20S 3.3U 50V
C22S 471
C23S 471


12V.PIP-CVBS.A-MUTE.V.B.ABNORMAL.3.5B/OTHER
CHROMA
FRONT-S/AV-IN
Y
IC204 MC14577
IC205 LA7016
Q209 C3198Y
Q206 C3198Y
Q210 C3198Y
DL505 150-Y02A
L205 150-Y01T
SECAM(H)
Q208 KRC102M
HS-SYNC
12V
ST-BY
MAIN-CVBS
<UBB PART>
UBB
Q1S C3198Y
Q2S C3198Y
Q3S C3198
Q4S C3198
IC2S GL 4558
IC3S GL 4558
IC4S GL 4558
<SUPER WOOFER PART>
L2S 10UH
IC5S KIA7042
SDA2
SCL2
FROM U-COM 50PIN
P103B
P103A
P1S
P604
R-IN
L-IN
RO-AV
LO-AV
LO(AMP)
RO(AMP)
WOOFER
R+L
RO(AV)
LO(AV)
OPTION
IC201
CXA1545AS
M-CV-OUT
P234
V1 L1 R1
V2 L2 R2
V0 L0 L0
IC203 UGL
CVBS-IN

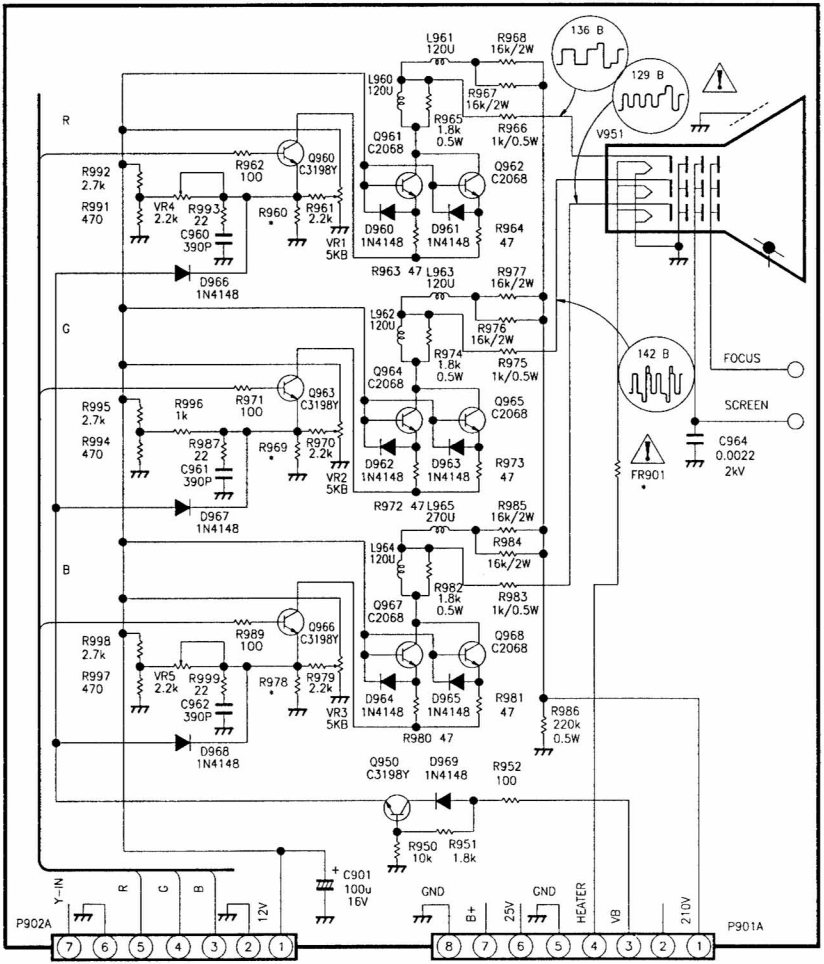

12V,PIP-CVBS,A-MUTE,V.B,ABNORMAL,3.58/OTHER
IC601 LA4282
IC602 LA4282
<SUPER WOOFER>
IC203 UGL-316KNT
IC202 LA7222
<W/O TXT PARTS>
W/O TXT:330
W/TXT:REMOVE
TV-CVBS-OUT
MAIN-CVBS
MUTE
12V
ST-9V
ST-12V
30V
40V
RO-AMP
LO-AMP
ABNORMAL
V.D
V.B
H.D
NC
WOOFER
BUFFER
OTHERS
N3.58/OTHER
P403A
(P403B)
P602
P601
P603
P604
L+R
Q601
C3198Y
Q603
A1266Y

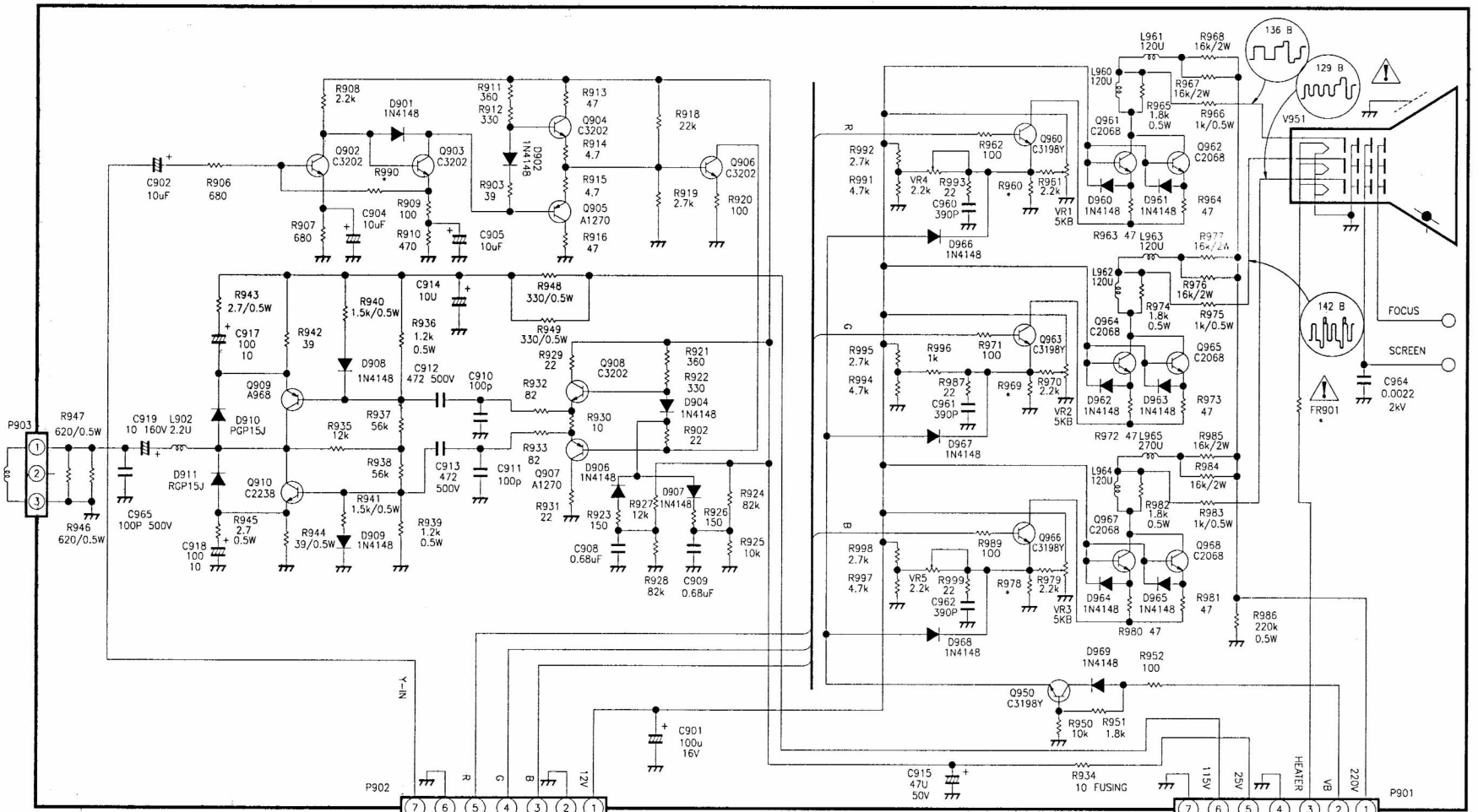


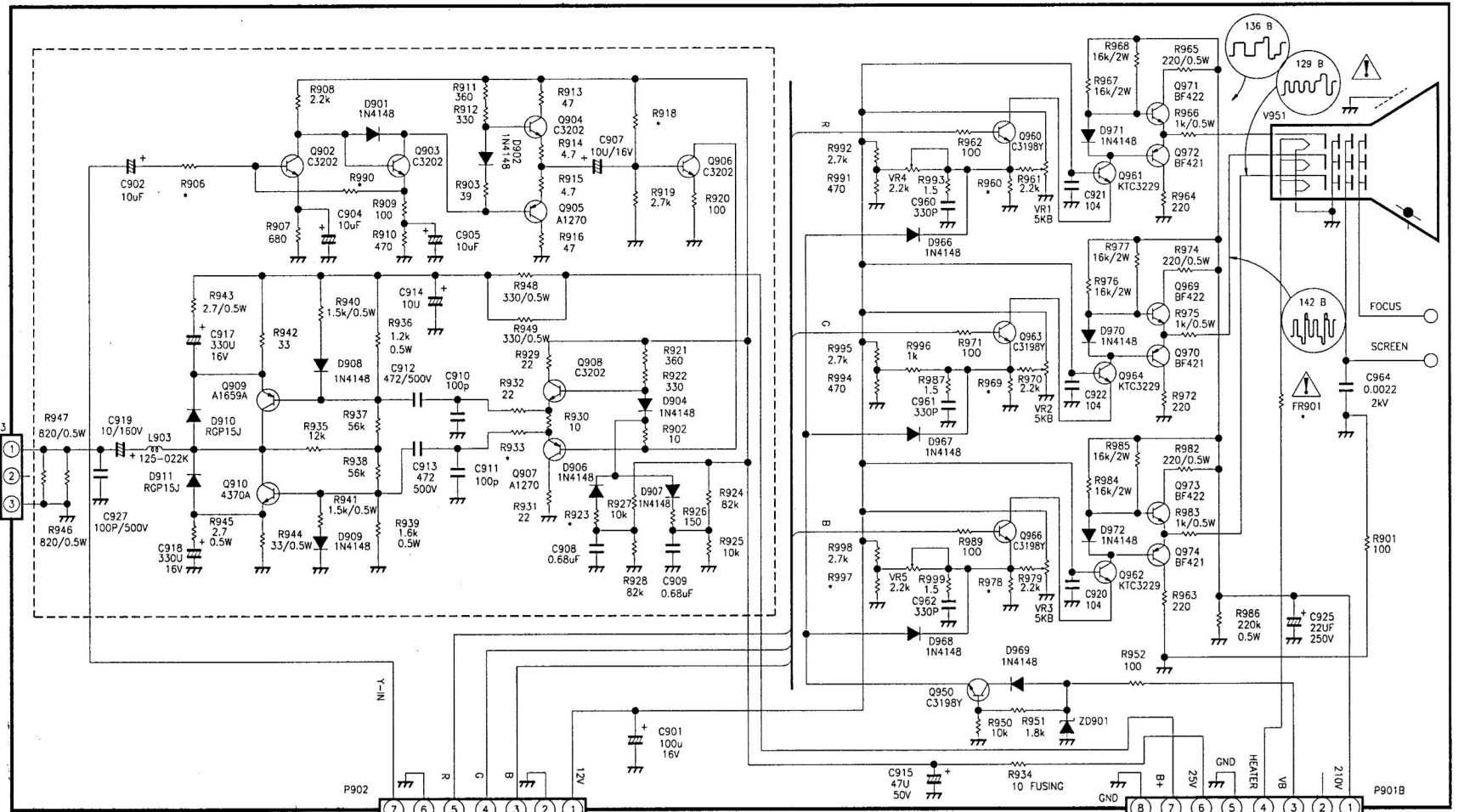
Power suplly & deflection board(1)

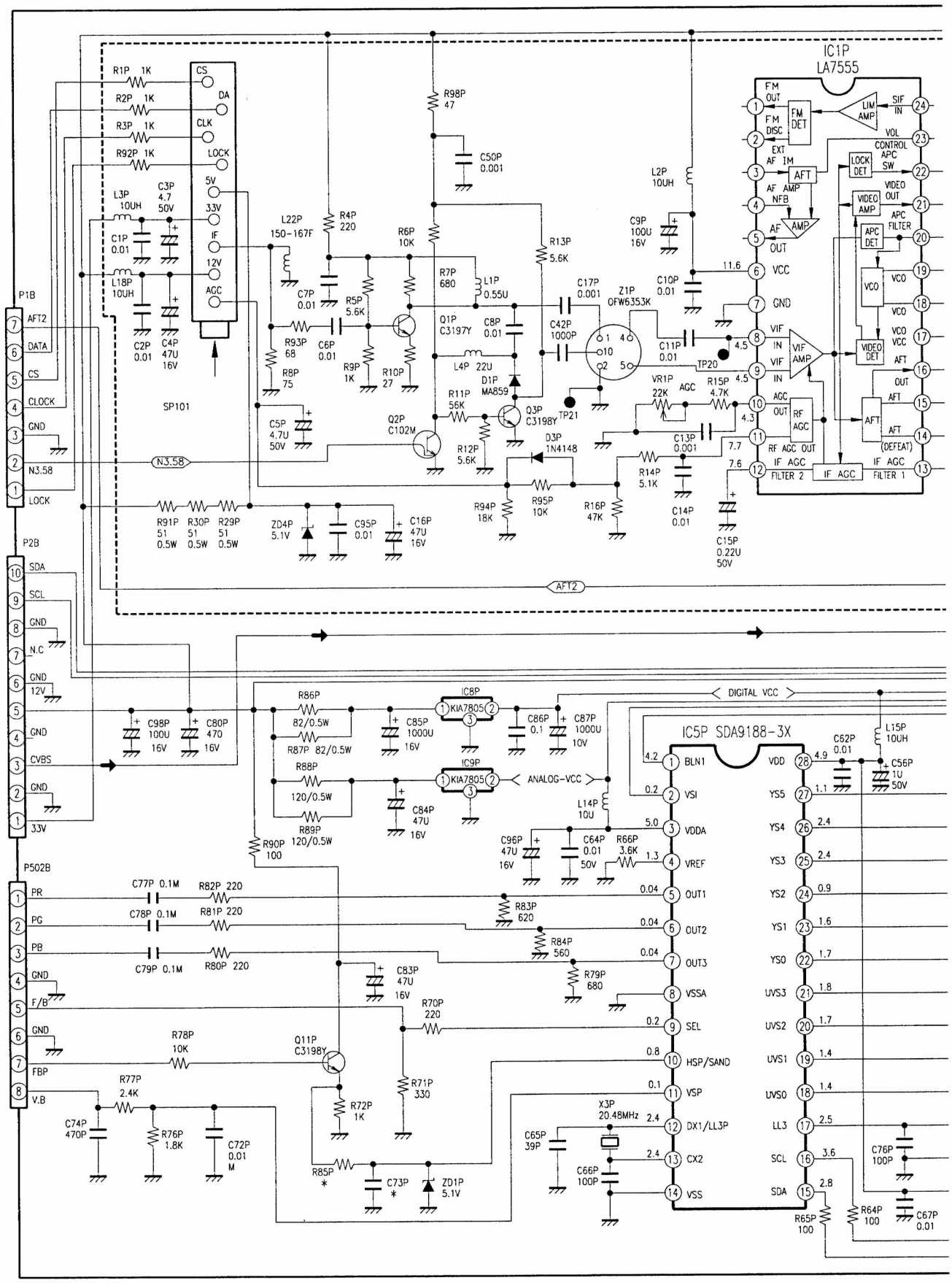


Power suplly & deflection board(2)

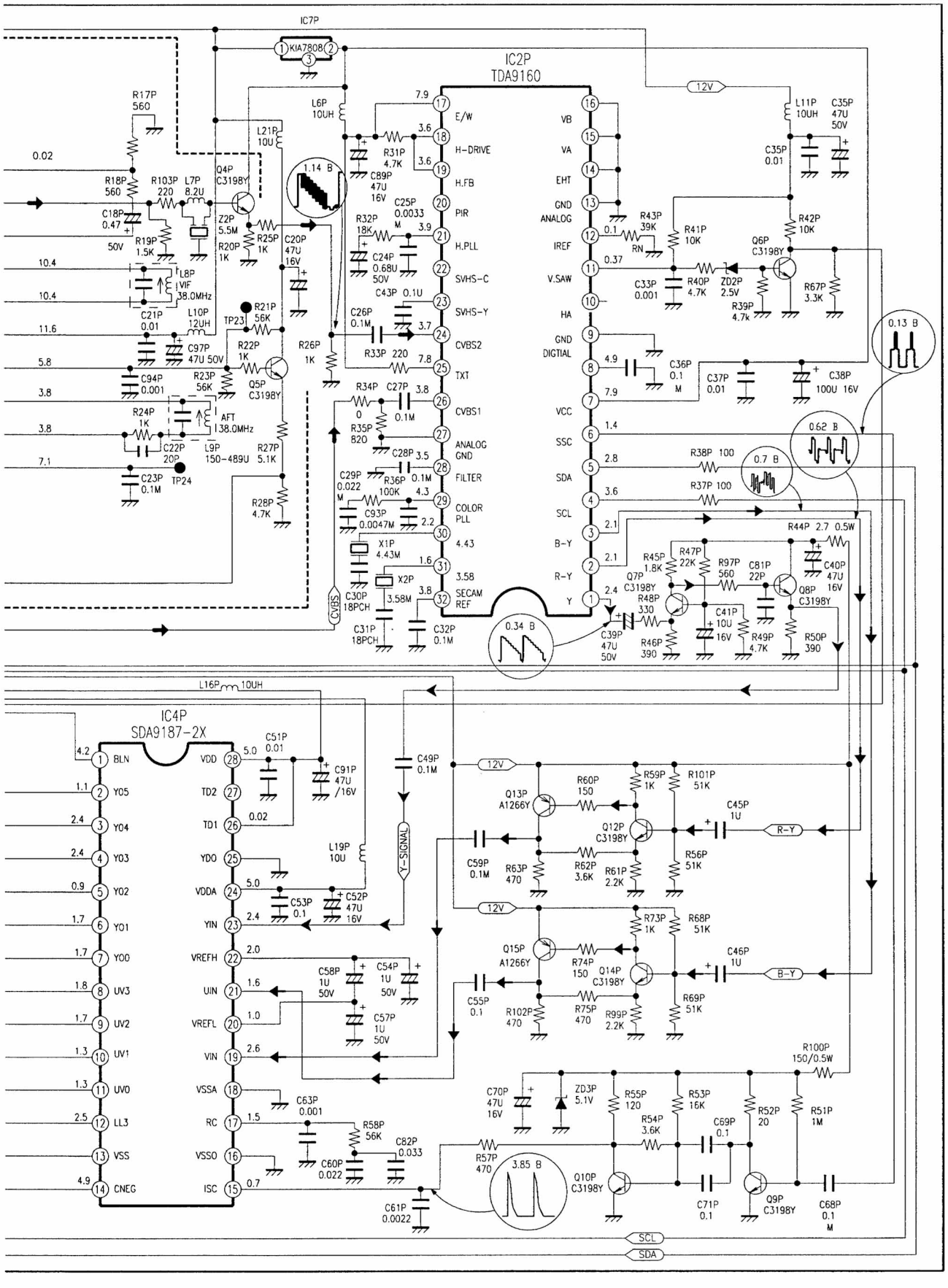

R
G
B
L961 120U
R968 16k/2W
L960 120U
R967 16k/2W
R965 1.8k 0.5W
R966 1k/0.5W
Q961 C2068
Q960 C3198Y
Q962 C2068
R992 2.7k
R991 470
VR4 2.2k
R993 22
C960 390P
R962 100
R960 *
R961 2.2k
VR1 5KB
D960 1N4148
D961 1N4148
R964 47
R963 47
D966 1N4148
L963 120U
R977 16k/2W
L962 120U
R976 16k/2W
R974 1.8k 0.5W
R975 1k/0.5W
Q964 C2068
Q963 C3198Y
Q965 C2068
R995 2.7k
R994 470
R996 1k
R971 100
R987 22
C961 390P
R969 *
R970 2.2k
VR2 5KB
D962 1N4148
D963 1N4148
R973 47
R972 47
D967 1N4148
L965 270U
R985 16k/2W
L964 120U
R984 16k/2W
R982 1.8k 0.5W
R983 1k/0.5W
Q967 C2068
Q966 C3198Y
Q968 C2068
R998 2.7k
R997 470
VR5 2.2k
R999 22
C962 390P
R989 100
R978 *
R979 2.2k
VR3 5KB
D964 1N4148
D965 1N4148
R981 47
R980 47
D968 1N4148
R986 220k 0.5W
Q950 C3198Y
D969 1N4148
R952 100
R950 10k
R951 1.8k
C901 100u 16V
136 B
129 B
142 B
V951
FOCUS
SCREEN
C964 0.0022 2kV
FR901 *
Y-IN
R
G
B
12V
GND
B+
25V
GND
HEATER
VB
210V
P902A
P901A
7 6 5 4 3 2 1
8 7 6 5 4 3 2 1


P903
P902
P901
Y-IN
R
G
B
12V
115V
25V
HEATER
VB
220V
FOCUS
SCREEN
136 B
129 B
142 B
V951
FR901
R947 620/0.5W
R946 620/0.5W
C919 10 160V
L902 2.2U
C965 100P 500V
D910 PGP15J
D911 RGP15J
Q910 C2238
C918 100 10
R945 2.7 0.5W
R944 39/0.5W
D909 1N4148
R935 12k
R937 56k
R938 56k
R941 1.5k/0.5W
R939 1.2k 0.5W
R942 39
R943 2.7/0.5W
C917 100 10
Q909 A968
D908 1N4148
R940 1.5k/0.5W
R936 1.2k 0.5W
C914 10U
C912 472 500V
C913 472 500V
C910 100p
C911 100p
R908 2.2k
D901 1N4148
Q902 C3202
Q903 C3202
R990
C902 10uF
R906 680
R907 680
C904 10uF
R909 100
R910 470
C905 10uF
R911 360
R912 330
R913 47
Q904 C3202
R914 4.7
D902 1N4148
R903 39
R915 4.7
Q905 A1270
R916 47
R918 22k
R919 2.7k
Q906 C3202
R920 100
R948 330/0.5W
R949 330/0.5W
R929 22
Q908 C3202
R932 82
R930 10
R933 82
Q907 A1270
R931 22
D906 1N4148
R921 360
R922 330
D904 1N4148
R902 22
R923 150
R927 12k
D907 1N4148
R926 150
R924 82k
R925 10k
C908 0.68uF
R928 82k
C909 0.68uF
C901 100u 16V
C915 47U 50V
R934 10 FUSING
R952 100
D969 1N4148
Q950 C3198Y
R950 10k
R951 1.8k
L961 120U
R968 16k/2W
L960 120U
R967 16k/2W
R965 1.8k 0.5W
R966 1k/0.5W
Q961 C2068
Q962 C2068
D960 1N4148
D961 1N4148
R964 47
R963 47
L963 120U
R977 16k/2W
L962 120U
R976 16k/2W
R974 1.8k 0.5W
R975 1k/0.5W
Q964 C2068
Q965 C2068
D962 1N4148
D963 1N4148
R973 47
R972 47
L965 270U
R985 16k/2W
L964 120U
R984 16k/2W
R982 1.8k 0.5W
R983 1k/0.5W
Q967 C2068
Q968 C2068
D964 1N4148
D965 1N4148
R981 47
R980 47
R986 220k 0.5W
R992 2.7k
R991 4.7k
VR4 2.2k
R993 22
C960 390P
R960
R961 2.2k
VR1 5KB
Q960 C3198Y
R962 100
D966 1N4148
R995 2.7k
R994 4.7k
R996 1k
R987 22
C961 390P
R969
R970 2.2k
VR2 5KB
Q963 C3198Y
R971 100
D967 1N4148
R998 2.7k
R997 4.7k
VR5 2.2k
R999 22
C962 390P
R978
R979 2.2k
VR3 5KB
Q966 C3198Y
R989 100
D968 1N4148

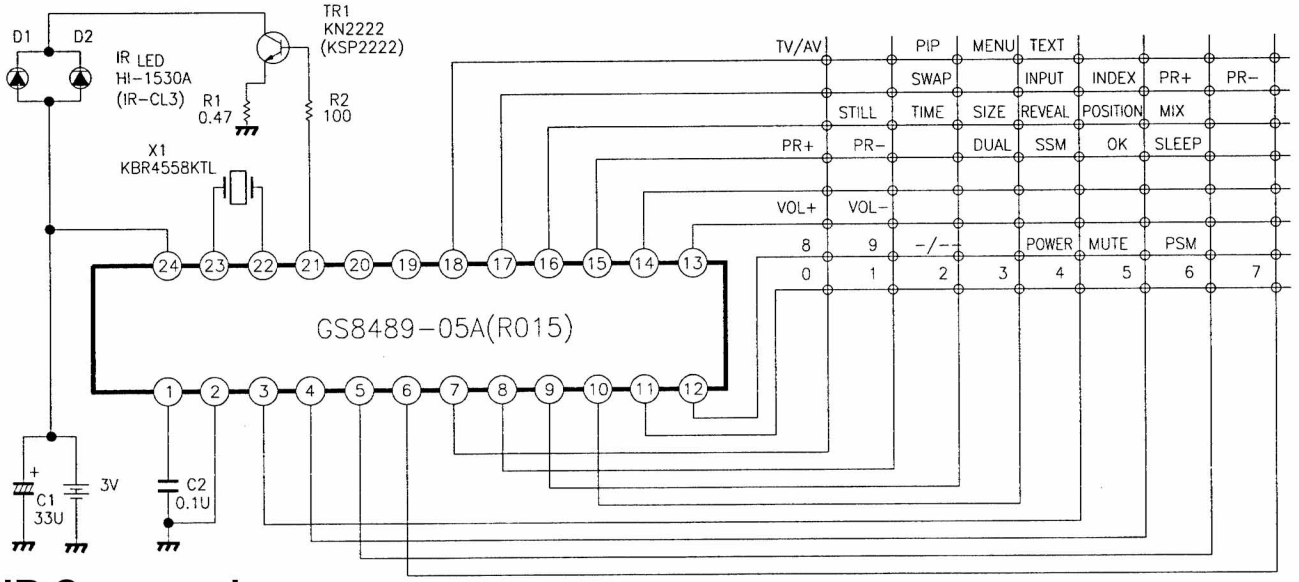

136 B
129 B
142 B
V951
FOCUS
SCREEN
FR901
C964 0.0022 2kV
R901 100
C925 22UF 250V
R986 220k 0.5W
R952 100
D969 1N4148
Q950 C3198Y
R950 10k
R951 1.8k
ZD901
C915 47U 50V
R934 10 FUSING
C901 100u 16V
P903
P902
P901B
Y-IN
R
G
B
12V
GND
B+
25V
GND
HEATER
VB
210V
R947 820/0.5W
C919 10/160V
L903 125-022K
R946 820/0.5W
C927 100P/500V
D911 RGP15J
Q910 4370A
D910 RGP15J
Q909 A1659A
C918 330U 16V
R945 2.7 0.5W
R944 33/0.5W
D909 1N4148
R939 1.6k 0.5W
R941 1.5k/0.5W
R938 56k
R937 56k
R935 12k
R942 33
R943 2.7/0.5W
C917 330U 16V
R940 1.5k/0.5W
D908 1N4148
C912 472/500V
C913 472 500V
C910 100p
C911 100p
R936 1.2k 0.5W
C914 10U
R948 330/0.5W
R949 330/0.5W
R908 2.2k
D901 1N4148
Q902 C3202
Q903 C3202
C902 10uF
R906
R990
R909 100
C904 10uF
R907 680
R910 470
C905 10uF
R911 360
R912 330
D902 1N4148
R903 39
R913 47
Q904 C3202
R914 4.7
C907 10U/16V
R915 4.7
Q905 A1270
R916 47
R918
R919 2.7k
Q906 C3202
R920 100
R929 22
Q908 C3202
R932 22
R930 10
R933
D906 1N4148
R931 22
R923
R927 10k
D907 1N4148
R926 150
R924 82k
R925 10k
C908 0.68uF
R928 82k
C909 0.68uF
R921 360
R922 330
D904 1N4148
R902 10
R992 2.7k
R991 470
R962 100
Q960 C3198Y
VR4 2.2k
R993 1.5
C960 330P
R960
R961 2.2k
VR1 5KB
C921 104
D966 1N4148
R968 16k/2W
R967 16k/2W
R965 220/0.5W
Q971 BF422
R966 1k/0.5W
D971 1N4148
Q972 BF421
Q961 KTC3229
R964 220
R995 2.7k
R994 470
R996 1k
R971 100
Q963 C3198Y
R987 1.5
C961 330P
R969
R970 2.2k
VR2 5KB
C922 104
D967 1N4148
R977 16k/2W
R976 16k/2W
R974 220/0.5W
Q969 BF422
R975 1k/0.5W
D970 1N4148
Q970 BF421
Q964 KTC3229
R972 220
R998 2.7k
R997
R989 100
Q966 C3198Y
VR5 2.2k
R999 1.5
C962 330P
R978
R979 2.2k
VR3 5KB
C920 104
D968 1N4148
R985 16k/2W
R984 16k/2W
R982 220/0.5W
Q973 BF422
R983 1k/0.5W
D972 1N4148
Q974 BF421
Q962 KTC3229
R963 220


IC1P
LA7555
SP101
IC5P SDA9188-3X
P1B
P2B
P502B
DIGITAL VCC
ANALOG-VCC
AFT2
N3.58

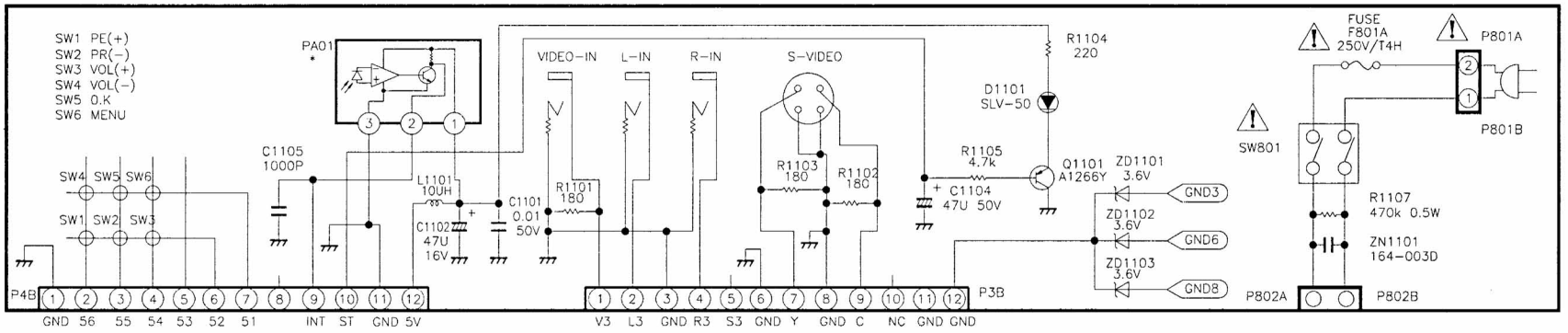
PIP module (1)


IC7P
KIA7808
IC2P
TDA9160
IC4P
SDA9187-2X
12V
E/W
H-DRIVE
H.FB
PIR
H.PLL
SVHS-C
SVHS-Y
CVBS2
TXT
CVBS1
ANALOG GND
FILTER
COLOR PLL
4.43
3.58
SECAM REF
VB
VA
EHT
GND ANALOG
IREF
V.SAW
HA
GND DIGTIAL
VCC
SSC
SDA
SCL
B-Y
R-Y
Y
CVBS
Y-SIGNAL
R-Y
B-Y
SCL
SDA
0.13 B
0.62 B
0.7 B
0.34 B
3.85 B
1.14 B

PIP module (2)



IR Command



Command module